Impaired Waters

October 1, 2012 – September 30, 2016 (FFY 2013-2016)

FFY 2015 REPORT

Statement of Environmental Problem/Issue:

Based on Minnesota's draft 2014 303(d) impaired waters list, there are 2452 impairments on 752 (15 are wetlands) lake basins and 1005 river segments. Minnesota is committed to using the impaired waters approach to restore water bodies to meeting their designated uses, while at the same time maintaining those waters that are meeting designated uses.

The MPCA will continue to work on its impaired waters approach with stakeholders through the Clean Water Council (see program development section below), with other state agencies through the Clean Water Fund Interagency Coordination Team and its subteams, and while working with Region 5 to meet the commitments set out in 303(d) of the Clean Water Act. This revision of the joint priority addresses these mutual efforts over the next four years.

This joint priority is broken into three components: **Program Development, Total Maximum Daily Load Studies (TMDLs), and Implementation.** Assessment and impaired waters listing activities are addressed in the Monitoring and Assessment shared priority section of this report.

MPCA Strategy: Restore the chemical, physical and biological integrity of Minnesota lakes, streams, and wetlands that do not support designated uses.

EPA Strategy: Improve water quality conditions in impaired watersheds and restore impaired waterbodies to achieve designated uses.

Program Development Priorities:

The MPCA's program development activities are driven in large part by Minnesota's Clean Water Legacy Act (CWLA). Signed into law on June 2, 2006, the purpose of the law is "to provide authority, direction and resources to protect and restore the state's surface waters, as required by section 303(d) of the federal Clean Water Act". (MN statutes, chapter 114D)

Following passage of the CWLA, stakeholders wanted to ensure a long-term source of sustainable funding for restoring and protecting Minnesota's waters. A further campaign with additional stakeholders resulted in a ballot initiative to amend Minnesota's Constitution. On November 4, 2008, Minnesota voters approved the Clean Water, Land and Legacy Amendment to *protect drinking water sources; to protect, enhance, and restore wetlands, prairies, forests, and fish, game, and wildlife habitat; to preserve arts and cultural heritage; to support parks and trails; and to protect, enhance, and restore lakes, rivers, streams, and groundwater*.

The Amendment increased Minnesota's sales and use tax rate by three-eighths of one percent on taxable sales, starting July 1, 2009, continuing through 2034. One-third of those funds are dedicated to a Clean Water Fund (CWF) to protect, enhance, and restore water quality in lakes, rivers, streams, and groundwater, with at least five percent of the fund targeted to protect drinking water sources. When

passed, it was explicitly stated that these funds are to supplement, not supplant, existing funding for state agencies.

The MPCA received $51.16M for the FY2010-11 biennium from the newly-created CWF. Activities funded included significantly enhanced monitoring, TMDL and protection strategy development, and implementation. For the FY2012-13 biennium, the MPCA received 47.7 M for these activities.

To continue steady progress with the implementation of our watershed approach (see next section below), the MPCA will continue to work closely with other Minnesota state agencies with water programs supported by the Clean Water Fund, along with the Clean Water Council, which provides funding recommendations to the Governor and the Legislature.

MPCA Program Priorities for FFY 2013-2016:

1. Implement Statewide Watershed Approach to prioritize and integrate Monitoring and Assessment, TMDL, and Restoration and Protection Activities

To meet its responsibility to develop plans to restore impaired waters and protect waters from becoming impaired, the MPCA has developed a Watershed Approach, a holistic strategy through which the state's 81 major watersheds scale (i.e. primarily 8-digit level HUCs, with some exceptions) are monitored and TMDLs and protection plans are developed into one Watershed Restoration and Protection Strategy (WRAPS) Report for each watershed. The WRAPS are developed on a repeating, 10-year schedule. State law now requires that a WRAPS will be completed for at least 10 percent of Minnesota's major watersheds every year.

The Watershed Approach provides for better coordination between federal and state government and local partners, including watershed districts, consultants, non-profit groups, and citizens, by using the element of common interest – the health of the watershed – as its focal point. More information on The Watershed Approach can be found in the report submitted to the U.S. Environmental Protection Agency entitled, [HYPERLINK "http://www.pca.state.mn.us/index.php/view-document.html?gid=10228"].

The Watershed approach is already increasing the efficiency and predictability of our work by integrating monitoring and assessment, TMDLs, and protection activities. This will be incorporated into the water plans of local government (watershed management organizations, soil and water conservation districts, counties and cities) who will develop and implement the detailed activities to implement the reductions called for in the WRAPS Report. Implementation funding for local implementers will be primarily provided by Minnesota's Board of Water & Soil Resources for nonpoint-related activities, and the Public Facilities Authority for wastewater and stormwater infrastructure projects.

FFY 2013 Report:

The 2013 Minnesota Legislature defined Watershed Restoration and Protection Strategies (WRAPS) in statute as follows:

Sec.12. Minnesota Statutes 2012, section 114D.15, is amended by adding a
Subdivision to read:

Subd.13. Watershed restoration and protection strategy or WRAPS. "Watershed restoration and protection strategy" or "WRAPS" means a document summarizing scientific studies of a major watershed no larger than a hydrologic unit code 8 including the physical, chemical, and biological assessment of the water quality of the watershed; identification of impairments and water bodies in need of protection; identification of biotic stressors and sources of pollution, both point and nonpoint; TMDL's for the impairments; and an implementation table containing strategies and actions designed to achieve and maintain water quality standards and goals.

The legislature further prescribed content for WRAPS as follows:

Sec. 13. [114D.26] WATERSHED RESTORATION AND PROTECTION STRATEGIES.

Subd. 1. Contents. The Pollution Control Agency shall develop watershed restoration and protection strategies. To ensure effectiveness and accountability in meeting the goals of this chapter, each WRAPS shall:

(1) identify impaired waters and waters in need of protection;
(2) identify biotic stressors causing impairments or threats to water quality;
(3) summarize watershed modeling outputs and resulting pollution load allocations, wasteload allocations, and priority areas for targeting actions to improve water quality;
(4) identify point sources of pollution for which a national pollutant discharge elimination system permit is required under section 115.03;
(5) identify nonpoint sources of pollution for which a national pollutant discharge elimination system permit is not required under section 115.03, with sufficient specificity to prioritize and geographically locate watershed restoration and protection actions;
(6) describe the current pollution loading and load reduction needed for each source or source category to meet water quality standards and goals, including wasteload and load allocations from TMDL's;
(7) contain a plan for ongoing water quality monitoring to fill data gaps, determine changing conditions, and gauge implementation effectiveness; and
(8) contain an implementation table of strategies and actions that are capable of cumulatively achieving needed pollution load reductions for point and nonpoint sources, including:

(i) water quality parameters of concern;
(ii) current water quality conditions;
(iii) water quality goals and targets by parameter of concern;
(iv) strategies and actions by parameter of concern and the scale of adoptions needed for each;
(v) a timeline for achievement of water quality targets;
(vi) the governmental units with primary responsibility for implementing each watershed restoration or protection strategy; and
(vii) a timeline and interim milestones for achievement of watershed restoration or protection implementation actions within ten years of strategy adoption.

Subd. 2. Reporting. Beginning July 1, 2016, and every other year thereafter, the Pollution Control Agency must report on its Web site the progress toward implementation milestones and water quality goals for all adopted TMDL's and, where available, WRAPS's.

Subd. 3. Timelines; administration. Each year, the Pollution Control Agency must complete WRAPS's for at least ten percent of the state's major watersheds. WRAPS shall be governed by the procedures for approval and notice in section 114D.25, subdivisions 2 and 4, except that WRAPS need not be submitted to the United States Environmental Protection Agency.

FFY 2014 Report:

Since the passage of Minnesota Statutes Section 114D.15, subd. 13 and 114D.26, informally referred to as the Accountability Act, MPCA has crafted the components of WRAPS and refined templates for each report that makes up a WRAPS. Each WRAPS gathers all the data collected in a watershed and synthesizes it into useable information for improving water quality. The data is used to create an implementation table which contains strategies and actions designed to achieve and maintain water quality goals. MPCA staff takes the lead on tasks such as project management, technical assistance, contract oversight, partner coordination, and civic engagement. As of 2013, the Snake River WRAPS was completed, with several other WRAPS statewide nearing completion (See Table 1). The Snake River WRAPS can be found here. [HYPERLINK "http://www.pca.state.mn.us/index.php/water/water-types-and-programs/minnesotas-impaired-waters-and-tmdls/tmdl-projects/st.-croix-river-basin-tmdl/project-snake-river-watershed-restoration-and-protection-study.html"]

WRAPS define reductions with strategies and milestones to achieve beneficial uses of clean water for Minnesota. The WRAPS summarizes scientific studies of the watershed, and includes
1) identification of impairments and water bodies in need of protection;
2) scientific analysis of impairments (TMDLs) that determine the sources of pollution and the reductions needed to meet water quality standards;
3) creation of an HSPF computer model for the physical, chemical, and biological assessment of the water quality of the watershed;
4) investigation of biotic stressors and sources of pollution (both point and nonpoint); and
5) civic engagement to ensure community and industry participation and understanding.

Table [SEQ Table * ARABIC]. Schedule for WRAPS completed to public notice stage.

[EMBED Excel.Sheet.12]

Future endeavors include sharpening the guidance for protection of unimpaired waters, finalizing the outlay of the implementation table, incorporation of the Nutrient Reduction Strategy, and other improvements to WRAPS processes. Process improvements are also being scheduled.

FFY 2015 Report:

MPCA has continued to implement the Minnesota Watershed Approach to efficiently characterize the state's waters and integrate all water quality activities. A state budget cut, in addition to a small federal budget cut, required us to revise the schedule for WRAPS, as noted in the table below. The 10 year cycle will be extended, unless further adjustments are made to the budget. See Table 2.

MPCA is working with the Minnesota Department of Natural Resources to develop guidance on protection of lakes and streams. Based on the data available and computer modeling, a draft version has been completed for lakes. The process includes several factors such as proximity to the impairment threshold, long term trend data, sensitivity of the lake to future phosphorus inputs, and other factors to determine how to prioritize lakes within a watershed. Guidance is also provided for a protection standard, based on a combination of all results and the water quality standard. This will be a more conservative approach than defaulted to the water quality standard. Further development is needed for local input into protection priorities. The next challenge will be streams and rivers, for both prioritization for protection and protection standards.

Table 2. Schedule for WRAPS completed to public notice stage, updated for 2015 budgets.

[EMBED Excel.Sheet.12]

2. Design and Implement an Effectiveness Tracking System

The CWLA's implementation policies required agencies "to establish and report outcome-based performance measures that monitor the progress and effectiveness of protection and restoration". (114D.20, subd. 3(7))

Since December 2007, the MPCA has been working with state, federal and local partners, including EPA, on a process to develop an effectiveness measurement framework. The initial phase of this project concluded in the fall of 2008 and resulted in the design of a framework that will describe progress at different scale and time periods.

The next phase of this project, which began in October, 2008, developed specific measures, a measurement tracking system, and pilot projects to evaluate the framework. To help implement this phase, the MPCA volunteered to participate in an EPA pilot on program effectiveness. EPA provided a consultant to assist the MPCA and its partner agencies over two years to help facilitate the process.

In February 2012, Minnesota agencies released their first collaborative report. It is designed to help clarify connections between Clean Water Funds invested, actions taken and outcomes achieved in FY2010-2011. Eighteen measures in the report provide a snapshot of how Clean Water Fund dollars are being spent and what progress has been made. The measures are organized into three sections: investment, surface water quality, and drinking water protection. Each measure has detailed status ranking and trend information.

Overall, the report shows the state is on track with its investments, though challenges remain. Of the 18 measures, status and trends vary; six measures showed improving trends, 11 showed no trend or were too early to assess, and one showed a slightly declining trend.

It is important to note that the report does not include information on other ongoing water-related work as it would be impossible to measure everything in one report or project. This report is the beginning of what is to come over the next 25 years in outcome-based water quality data and information.

The FY2010-2011 final report, the summary document and the metadata sheets can be found on [HYPERLINK "http://www.legacy.leg.mn/funds/clean-water-fund"]: [HYPERLINK "http://www.legacy.leg.mn/funds/clean-water-fund"]

FFY 2013 Report:

A new FY 2012 -2013 Report will be released in January of 2014. This report will have two more years of data to start to show trends on key measures. In addition, since the last report was released, the Interagency Team has been working to develop two new areas of measures: key stressor or pressure measures to help put our other measures in context over time and social measures to measure how well our environmental work is connecting to Minnesotan's understanding of water quality issues and changes of behavior over time. Social science has not been a strength of the team and outside experts

were sought to help guide our thinking. The pressure measures will be presented in the 2014 report. More work will be necessary to integrate the social measures work with our environmental measures.

FFY 2014 Report:

A new FY 2012 -2013 Report was released in January of 2014. This report has more data to start to show trends on key measures. This report also highlights key stressor or pressure measures to help put our other measures in context over time and social measures to measure how well our environmental work is connecting to Minnesotan's understanding of water quality issues and changes of behavior over time.

FFY 2015 Report:

We are currently beginning work on a new Clean Water Fund Performance Report for 2014-2015. In addition, by July 2016, in accordance with Minnesota Statutes Chapter 114D.26, subd. 2, the MPCA is required to report then and every other year thereafter, the progress toward implementation milestones and water quality goals for all adopted TMDLs and, where available, WRAPSs. This reporting must be done on the MPCA website. We have reviewed several concepts, including the Chesapeake Bay stat site, to develop a format for these measures. In July 2016, the report may be a pdf, as we continue to develop a real-time method for showing pollutant loads reduced by conservation practices installed statewide. NRCS has agreed to provide data on the HUC12 scale as their requirements allow, and work is ongoing without the need for an MOU at this point. The staff on both sides continues to have a good working relationship that allows productive efforts.

3. Develop a Watershed Data Integration System

To help track and report on effectiveness measures, among many other management needs, the MPCA is developing an information management system, called the Watershed Data Integration Project (WDIP), for elements of its watershed programs including: assessment and monitoring; administrative and financial; geospatial data and information; and TMDL development and implementation and protection efforts. When fully implemented, the system will integrate and enhance existing and new databases, and connect them through an information portal. A business object model was completed for the project in 2007 and the initial design of system requirements was completed at the end of FFY09.

Because of support from the Clean Water Fund, the MPCA continues to make progress with the WDIP. Phase 3 of WDIP, to be completed in June 2013, undertakes a variety of data integration and stabilization initiatives. These are vital to building a foundation for future progress in the WDIP in order to provide access to water quality data, transparency and accountability for watershed activities. Right now WDIP has 12 IT projects. Three are completed, six are active and three are pending.

Outcomes from the completed projects include:

- Overall data cleanup that allowed the watershed webpages to accurately display monitoring, assessment and implementation activities
- Internal water body search tool - access via the Launchpad, or at [HYPERLINK "http://cf.pca.state.mn.us/water/watershedweb/wdip/search_more.cfm"] (map tab)
- External data retrieval tool for accessing monitoring and assessment information on water bodies. [HYPERLINK "http://cf.pca.state.mn.us/water/watershedweb/datasearch/waterSearch.cfm"]
- Electronic documentation of interagency measures and outcomes

More than 100 staff and management play an integral part in the success of this on-going effort, participating in roles ranging from project sponsors and subject matter experts, to IT analysts and developers. For further information, go to: [HYPERLINK "http://www.pca.state.mn.us/index.php/water/water-types-and-programs/surface-water/watershed-approach/watershed-data-integration-project.html"]

EPA will be looking for potential transferability of what is accomplished here to other states.

FFY 2013 Report:

The 2013 Minnesota Legislature awarded additional funding to the MPCA to continue work on integrating internal data systems that will provide better data capture, tracking and reporting for the watershed approach. The focus of WDIP work for the next two years of funding is to develop a better water assessment database and create an IBI (Index of Biological Integrity) database, in addition to the broader effort of developing a more robust watershed data tracking system that will enable greater transparency and reporting flexibility within the MPCA and on our Website.

The timing of this work aligns with a larger MPCA undertaking to replace the agency's primary data system (Delta.) This project is scheduled for the next two years and will likely involve additional enhancements into the future to meet all the agency's needs. Many of the WDIP goals can be met through the new agency data system (Tempo360), and there is currently extensive review occurring to assess the functionality of the new system in relation to the expected WDIP deliverables. However, WDIP continues to work on developing deliverables that can either be migrated into the new data system or easily linked.

In the past quarter, significant progress has been made on implementing a new reporting structure that allows for easy internal access to watershed project data. The highlight of these recent efforts was the data linkage between our watershed data system (Delta) and the state's fiscal accounting system (Swift.) This linkage now provides MPCA with real-time data (with just an overnight data refresh) on project activity milestones and project spending. Additional enhancements in the coming months will include search capabilities by date, geography, and additional impairment data.

FFY 2014 Report:

In FFY 2014, further enhancements were made to the "Watershed Management Tracking" reporting structure that allows for internal access to watershed project and financial data. The ability to create reports based on geopolitical data is now available, and the quality and accuracy of the financial data being displayed continues to be refined. In addition, new milestone tracking reports were created using this structure. A new tool that allows MPCA staff to associate different types of projects, including non-MPCA projects, with the major watershed was developed and is now being used to create more robust watershed reports. The baseline report that will pull data from that project cross-reference initiative is currently in development.

The MPCA's initiative to replace the agency's primary data system (Delta) with TEMPO360 is now well under way. A plan of action was established to integrate, convert or sunset any existing Watershed applications to be addressed by TEMPO360. This project is focused on ensuring watershed applications built through WDIP continue to operate during and after the TEMPO360 conversion.

The Water Assessment and Listing Information System (WALIS) project consolidates several disparate

but related water assessment and listing databases into an integrated, non-redundant architecture and convert their data into the new environment. Development work and testing occurred throughout the year and will be ongoing until completion.

Throughout the upcoming year, MPCA will continue to implement data integration and access improvements with the goal of creating a properly organized and efficient data structure underlying all current and future surface water-related systems.

FFY 2015 Report:
MPCA's initiative in TEMPO360 is scheduled to go live in April 2016 for the "Watershed Management Tracking." A select group of staff have been working on testing and training development this fiscal year. The all-staff training is planned for early next year.

Work on the Water Assessment and Listing Information System (WALIS) project consolidates continues. As of November 2015 the system is partially functional and is being used to prepare the draft 2016 impaired waters list. MPCA will keep EPA apprised of the schedule for full implementation of the new WALIS system.

4. Special Joint Projects with EPA
In addition to the effectiveness measures project discussed in #2 above, MPCA and EPA are working together on several nationally recognized special projects, supported in part by EPA HQ funding. Projects include the Minnehaha Creek Watershed Stormwater TMDL effort to assess BMP effectiveness, Lake Pepin TMDL Implementation Plan, and Nutrient Reduction Strategy to reduce hypoxia problems in the Gulf of Mexico. As a member of the Hypoxia Task Force, Minnesota is developing State Level Nutrient Reduction Strategies concurrently with sister states and consistent with the Hypoxia Action Plan and EPA guidance in the Nancy Stoner memorandum titled "Working with States..." March 16, 2011. Minnesota's strategies will build on the watershed approach targeting pollutant reduction and water quality protection in each of the state's 81 HUC8 watersheds by addressing nutrient reductions needed for waters at a scale of HUC 8 and greater(ex. Minnesota River, St Croix River, and Lake Pepin) as well as downstream of Minnesota. The pollutant reduction programs that the state has established will be assessed and recommendations for programs needed to meet milestone nutrient reductions will be provided. The primary goal of these strategies will be meaningful and achievable interim nutrient load reduction to Minnesota and downstream waters. The Minnesota Nutrient Reduction Strategy is completed and is available on the nutrient website at [HYPERLINK "http://www.pca.state.mn.us/nutrientreduction"]
A complementary communication website for HUC8 level rapid nutrient assessments and titled the Nutrient Planning Portal is available at: [HYPERLINK "http://mrbdc.mnsu.edu/mnnutrients/"] . Recommendations for tracking progress of nutrient reduction will be a component of the State Level Strategies.

In addition, the MPCA has partnered with EPA's Healthy Watershed Initiative to conduct a pilot project in the Snake River Watershed. We are participating with The Nature Conservancy, the Department of Natural Resources, and several local partners to develop the protection elements of our WRAP for the Snake, utilizing expertise of EPA's contractor, Cadmus Consulting, to identify priority protection areas and how to sequence protection activities in the watershed. The results of this work will also serve as a pilot to help the MPCA design its protection strategies for watersheds throughout the state.

FFY 2013 Report:

A Draft state nutrient reduction strategy has been completed and is open for public and stakeholder review until Dec 18, 2013 The strategy includes geographic priorities and sources Goals and baselines for reduction efforts and identifies needed reductions to meet milestone goals and programs to help implement those reductions at the states 3 major drainage basins. It also sets targets for reduction planning at the HUC8 level. The strategy reports that the state is on target to have River Eutrophication Standards by 2015 and calls for continued action on a nitrogen toxicity standard for Rivers. The draft strategy is available on the Nutrient Reduction Website.

FFY 2014 Report

Minnehaha Creek

MPCA completed the "Minnehaha Creek Bacteria and Lake Hiawatha — Excess Nutrients TMDL" in collaboration with the Minnehaha Creek Watershed District and EPA. The project was largely funded by EPA and was approved in February 2014.

Nutrient Reduction Strategy

The Minnesota Nutrient Reduction Strategy (NRS) is completed and is available on the nutrient website at [HYPERLINK "http://www.pca.state.mn.us/nutrientreduction"] . A complementary website for communicating the NRS and providing HUC8 level rapid nutrient assessments which is named the Nutrient Planning Portal is available at [HYPERLINK "http://mrbdc.mnsu.edu/mnnutrients/"] .

EPA's Healthy Watershed Initiative

In May of 2013, EPA's consultant, Cadmus Group, submitted a final Healthy Watershed Initiative Report. The report name [HYPERLINK "http://www.pca.state.mn.us/index.php/water/water-types-and-programs/minnesotas-impaired-waters-and-tmdls/tmdl-projects/st.-croix-river-basin-tmdl/project-snake-river-watershed-restoration-and-protection-study.html"], was posted on our website. Overall the report identified five recommendations for ways to enhance existing efforts and help fill gaps:

1. Conduct a detailed review of city, township, county, and state ordinances to identify opportunities to strengthen protections;

2. Encourage civic engagement and collaboration and coordination among state agencies, conservation groups, counties, and watershed organizations to strengthen watershed protection efforts;

3. Conduct a detailed systems-based analysis using existing datasets and tools to prioritize specific areas for protection;

4. Develop an inventory of culverts and dams within the watershed and prioritize them for restoration or removal to improve aquatic connectivity; and

5. Assess the presence and prevalence of invasive species within the Snake River Watershed.

These recommendations have been brought in as some of the actions identified in the [HYPERLINK "http://www.pca.state.mn.us/index.php/water/water-types-and-programs/minnesotas-impaired-waters-and-tmdls/tmdl-projects/st.-croix-river-basin-tmdl/project-snake-river-watershed-restoration-and-protection-study.html"] that was approved by the MPCA in August of 2014. This report lays out the strategies necessary to not only restore the impaired waters but also identifies actions necessary to protect the unimpaired waterbodies.

The MPCA has partnered with EPA's Healthy Watershed Initiative to conduct a pilot project in the Snake River Watershed. We are participating with The Nature Conservancy, the Department of Natural

Resources, and several local partners to develop the protection elements of our WRAP for the Snake, utilizing expertise of EPA's contractor, Cadmus Consulting, to identify priority protection areas and how to sequence protection activities in the watershed. The results of this work will also serve as a pilot to help the MPCA design its protection strategies for watersheds throughout the state.

FFY 2015 Report:

No new projects with EPA were done this year. We are touching base with NRCS and will tour the NQWI sites in the fall of 2015 and spring of 2016, to check on progress and determine if there are other opportunities for water quality improvements.

TMDL Priorities:

As of May 2012, the MPCA has received EPA approval of, 1,355 TMDLs – 239 for waters impaired by conventional pollutants and 1,096 for mercury-impaired waters. Overall, as of the 2010 approved impaired waters inventory, 66% of total TMDLs needed for conventional impairments are underway or in implementation, and 68% of TMDLs needed for toxic impairments

The MPCA's top priority is to continue to initiate eight major watershed projects per year through our watershed approach. Currently, intensive monitoring projects are completed or underway in 52% of Minnesota's watersheds, while WRAP strategies are underway in 42% of our 81 watersheds.

To continue to improve our efficiency, we are currently developing a standardized template for our WRAP Reports. We are working with local stakeholders and a consultant to create an approach that will ensure that our reduction targets, timelines, milestones, sources, and other key elements are clearly identified so that they can be effectively implemented into local water plans.

FFY 2013 Report:

A standardized WRAPS template was developed for use in all major watersheds. It can be found at: [HYPERLINK "http://www.pca.state.mn.us/index.php/water/water-types-and-programs/surface-water/watershed-approach/index.html"]

FFY 2014 Report

River, lake, and wetland impairments (2014 proposed inventory): The MPCA has received EPA approval of 1,686 impairments that needed TMDL studies as of October 2014. 1,272 of those are for mercury. Non-mercury impairments: 2,109 of the 2,452 listed impairments are in development (86% of total TMDLs needed) and 413 TMDLs are approved/in implementation (99 approved projects).

Progress and Outcomes to Date

- Four of the 80 WRAPS have been completed and approved by MPCA (Pomme de Terre River Watershed, Snake River Watershed, Sunrise River Watershed and Mississippi River-Lake Pepin Tributaries Watershed).

- **Restored waters:** 35 previously impaired lakes and river segments (15 lake impairments and 20 river impairments on 18 river segments) have been restored to water quality standards.

The MPCA's top priority is to continue to initiate eight major watershed projects per year through our watershed approach. Currently, intensive monitoring projects are completed or underway in 72% of Minnesota's watersheds, while WRAP strategies are underway in 59 of our 80 watersheds (74%).

Additional guidance documents and templates were developed in 2014 for WRAPS and TMDL projects and work continues on the WRAPS template to incorporate the requirements of the Clean Water Accountability Act. [HYPERLINK "http://www.pca.state.mn.us/index.php/view-document.html?gid=20531"] was developed for addressing lakes in WRAPS. Stressor ID Report Technical Guidance and Report Template were developed. Local partners may find this technical guidance useful for stressor identification work. Also, a TMDL Report Template has been developed.

FFY 2015 Report:

The "Prioritization Plan for Minnesota 303(d) Listings to Total Maximum Daily Loads" has been drafted by MPCA and submitted to EPA (approved in October 2015). This report meets the needs EPA's Long Term Vision for Assessment, Restoration and Protection under the Clean Water Act Section 303(d) Program. The "Prioritization Plan for Minnesota 303(d) Listings to TMDLs" (i.e., the "Prioritization Plan"), will address the Prioritization Goal Statement in EPA's framework for implementing the Clean Water Act Section 303(d) Program: "Prioritization" *For the 2016 integrated reporting cycle and beyond, States review, systematically prioritize, and report priority watersheds or waters for restoration and protection in their biennial integrated reports to facilitate State strategic planning for achieving water quality goals.* (From *A Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program*.)

While the specific requirements of this federal effort do not align perfectly our existing Minnesota Watershed Approach, we understand the need for a national measure and can accommodate the Region 5 request in this context. MPCA is committing to develop TMDLs for the specified segments in this report for conventional pollutants by 2022, following the schedule for our Watershed Restoration and Protection Strategies (WRAPS) report completion schedule. The baseline acreage for these segments is 600,751 acres and the universe is 6,573, 576 acres. For FFY2016, the segments addressed by TMDLs should consist of 899,564 (which include the baseline of 600,751 acres).

Due to negotiations by the USGS and their Canadian equivalent, there are now 80 (not 81) HUC8 watersheds in Minnesota. Eight of the 80 HUC8 WRAPS have been completed and approved by MPCA (Pomme de Terre River Watershed, Snake River Watershed, North Fork of the Crow River, Crow Wing River, Mississippi River Saint Cloud and Mississippi River-Lake Pepin Tributaries).

The 2014 proposed inventory of river, lake and wetland impairments should have EPA approval soon.

Implementation Priorities:

Through Clean Water Fund appropriations, implementation projects are being supported in almost every watershed in the state. Nevertheless, demand still out paces available funding. As a result, the MPCA working with BWSR and other state agencies have directed significant resources towards improving our prioritization and targeting tools to better understand where funding can have the highest impact. Targeting will be improved through LiDAR, which has been completed for the entire state, as well as through other geospatial tools. New criteria has been set in state funding programs to improve accountability and effectiveness. The MPCA looks forward to reporting progress in this area over the next three years.

FFY 2013 Report:

There were ten (10) MPCA approved Implementation Plans in FFY13.

The Clean Water Accountability Act was promulgated in 2013; specifying the content, timeline and funding priorities for developing Watershed Restoration and Protection Strategies (WRAPS). Fortunately, a new template for the WRAPS was already underway and will provide a key tool to help with the tracking for accountability and progress toward clean water. The WRAPS Report template will utilize tools and processes that are now available and cost effective to analyze the data, including: stressor identification, Hydrologic Simulation Program FORTRAN (HSPF) modeling, and spatial analysis. These tools will provide valuable information and lead to prioritization, targeting and documentation of restoration and protection strategies that were not possible a few years ago. The template will provide consistent expectations of data quality and analyses valuable to inform local planning as well as assist with prioritized targeting of implementation efforts.

FFY 2014 Report:

There were seven (7) MPCA approved Implementation Plans in FFY14.

The Clean Water Accountability Act was promulgated in 2013; specifying the content, timeline and funding priorities for developing Watershed Restoration and Protection Strategies (WRAPS). The WRAPS report template that was developed in 2013 continues to be improved to incorporate the requirements of the Clean Water Accountability Act and will provide a key tool to help with the tracking for accountability and progress toward clean water. The template will provide consistent expectations for data quality and analyses valuable to inform local planning as well as assist with prioritized targeting of implementation efforts. The completed WRAPS reports will provide valuable information and lead to prioritization, targeting and documentation of restoration and protection strategies that were not possible a few years ago. Furthermore, efforts are underway to develop a data system to capture the WRAPS report data elements, making it possible to link implementation Best Management Practices (BMPs) with the strategies in the Implementation Tables. The MPCA is legislatively mandated to begin reporting on progress toward implementation milestones and water quality goals for all adopted TMDLs and, where available, WRAPS, on its web site beginning July 1, 2016.

FFY 2015 Report:

The last MPCA Implementation Plans have been written and any new plans will be done in WRAPS Report format. The WRAPS report format and the grantee's 319 work plan should meet the requirements for EPA's nine key elements. We are currently working with Region 5 to determine if further changes are needed.

This year, MPCA applied for an exemption to the 319 guidelines, as three proposed projects did not meet the requirements of having an approved TMDL. MPCA was able to show that the state provided over $5M for implementation through other funding routes, and the exemption was granted. The projects included in the $5M of state funds will be entered into GRTS.

Additional information:

For more information on the Impaired Waters Joint Priority, contact:
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